



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/005,820	12/04/2001	William C. Schneider	MSC-23178-1	9636

24957 7590 09/10/2002

NASA JOHNSON SPACE CENTER  
MAIL CODE HA  
2101 NASA RD 1  
HOUSTON, TX 77058

EXAMINER

PECHHOLD, ALEXANDRA K

ART UNIT	PAPER NUMBER
----------	--------------

3671

DATE MAILED: 09/10/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/005,820

Applicant(s)

SCHNEIDER ET AL.

Examiner

Alexandra K Pechhold

Art Unit

3671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 3 recites the limitation "the fasteners" in line 1. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, 8-13, 22, 27, and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Uotila (US 5,310,277).

Regarding claims 1, 10, and 22, Uotila discloses a method and device for impeding motion of a land vehicle comprising:

- a net (or means for receiving and retaining the moving body), seen as net (1) in Figs. 1, 4, and 5

Art Unit: 3671

- anchors (or means for anchoring the receiving and retaining means), seen as anchors (3) in Figs. 1 and 4
- a flexible strip arranged to secure the net to the anchors (or means for decelerating the moving body in a controlled manner), seen as brakes (4, 5) in Figs. 1 and 4-7, which are described by Uotila as discardable fabric brakes formed of one or several ribbons which have been woven or stitched together over a certain length, so that ribbons are forced to be torn apart when pulled (Col 2, lines 40-65).

Regarding claim 2, Uotila discloses that the brake members are formed of two ribs that have been woven or stitched together over a certain length, and they usually have two ends, on which draw members have been formed. Pulling on the draw members will cause the ribbons to be forced to be torn apart (Col 2, lines 40-51). Therefore, since the stitching breaks first, tearing apart the ribbons, the tensile strength of the stitching must be less than the tensile strength of the ribbons.

Regarding claim 3, Uotila discloses that the ribbons forming the fabric brakes have been woven or stitched together over a certain length (Col 2, lines 40-51), therefore the stitched and/or woven portions serving as the fasteners.

Regarding claims 8, 9, 12, 13, 27, and 28, Uotila discloses both a non-constant level of deceleration as well as a substantially constant level of deceleration in the action of the braking members (4, 5). Uotila notes that the first brake members are open, meaning that in conclusion of their operation the first brake members altogether cease to operate, and release their grip. The second brake members become locked in

Art Unit: 3671

conclusion of their retarding effect, whereby the braking force increases to great height in the end (Col 2, lines 52-61). Therefore, it appears the first breaking members provide a substantially constant level of deceleration, and the second breaking members provide a non-constant level of deceleration since the braking force increases to great height in the end.

Regarding claim 11, Uotila illustrates means for holding up the receiving means in a vertical position, seen as posts (6) in Figs. 1 and 4.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 7, 14, 18-21, 25, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uotila (US 5,310,277).

Regarding claims 7, 14, 21, 25, and 26, Uotila discloses a device for impeding motion of a land vehicle comprising:

- a first barrier, seen as net (1<sup>1</sup>) in Fig. 9
- a second barrier, seen as net (1<sup>2</sup>) in Fig. 9, positioned alongside the first net, the first row being staggered from the second row (Col 3, lines 21-25)
- a plurality of anchors, seen as anchors (3) in Figs. 1 and 4

- each barrier comprising a net, seen as nets (1<sup>1</sup>) and (1<sup>2</sup>) in Fig. 9, and one or more flexible strips arranged to secure the net to the anchors, seen as brakes (4, 5) in Figs. 1 and 4-7, which are described by Uotila as discardable fabric brakes formed of one or several ribbons which have been woven or stitched together over a certain length, so that ribbons are forced to be torn apart when pulled (Col 2, lines 40-65).

Uotila fails to disclose a first row of barriers and second row of barriers positioned end-to-end (claim 14), with each barrier having a male portion and corresponding female portion of a mated joint (claim 21). Yet Uotila notes that it is obvious that any number of nets, such as may be considered necessary, can be placed one after the other (Col 3, lines 35-37). The nets are designed for greatest possible cover for use in stopping any passenger car that is in motion on the road (Col 4, lines 22-25). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the staggered nets in Fig. 9 of Uotila so there is a row of first and second barriers positioned end-to-end, and each barrier having corresponding male and female portions of a mated joint, since Uotila states in column 3, lines 35-37 that it is obvious that any number of nets, such as may be considered necessary, can be placed one after the other, and in column 4, lines 22-25 that the nets are designed for greatest possible cover for use in stopping any passenger car that is in motion on the road. So therefore if you have multiple side-by-side cars approaching the net, a row of barriers would be the logical solution in order to satisfy Uotila's desire for the greatest possible cover for use in stopping any passenger car that is in motion on the road, and clearly

Art Unit: 3671

the barriers would have to be joined by some sort of mated joint. Furthermore, it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Regarding claims 18 and 19, Uotila discloses both a non-constant level of deceleration as well as a substantially constant level of deceleration in the action of the braking members (4, 5). Uotila notes that the first brake members are open, meaning that in conclusion of their operation the first brake members altogether cease to operate, and release their grip. The second brake members become locked in conclusion of their retarding effect, whereby the braking force increases to great height in the end (Col 2, lines 52-61). Therefore, it appears the first breaking members provide a substantially constant level of deceleration, and the second breaking members provide a non-constant level of deceleration since the braking force increases to great height in the end.

Regarding claim 20, Uotila illustrates a plurality of support members mounted alongside the barriers, seen as posts (6) in Figs. 1 and 4.

7. Claims 4-6, 15-17, 23, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uotila (US 5,310,277) as applied to claims 1, 14, and 22 above, and further in view of Terio (US 4,780,020). Uotila fails to disclose a first sacrificial panel, which includes a smooth surface on one side, and a second sacrificial panel, the first and second panels sandwiching the net therebetween. Terio teaches a vehicle barrier comprised of I-beam posts with cable therebetween to stop a high speed vehicle (see abstract). The barrier employs panels (40), which would not only make the gate more

Art Unit: 3671

pleasing to look at but would hide the functioning components of the barrier from view to protect the from weather and scrutiny by potential terrorist (Col 5, lines 1-5). Two such panels would be employed between each pair of I-beams, one in front of the cables, on in back, between the cables and webs (2, 3), respectively (Col 5, lines 5-8). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the barrier of Uotila to include first and second sacrificial panels sandwiching the net therebetween as taught by Terio, since Terio states in column 5, lines 1-8 that the panels would not only make the gate more pleasing to look at but would hide the functioning components of the barrier from view to protect the from weather and scrutiny by potential terrorist, and two such panels would be employed, one in front of the cables, on in back.

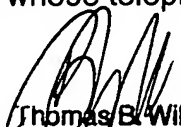
### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexandra Pechhold whose telephone number is (703) 305-0870. The examiner can normally be reached on Mon-Thurs. from 8:00am to 5:30pm and alternating Fridays from 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will, can be reached on (703)308-3870. The fax phone number for this Group is (703) 305-3597.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1113.

  
Thomas B. Will  
Supervisory Patent Examiner  
Group 3600